

## Scale-Up: SCI Pint-Size Science

**Overview:** The Science Center of Iowa's *Pint Size Science* program provides a platform for young children ages 3 to 5 to explore science in a highly-engaging, interactive, and safe manner.

### Program Summary

JD Chesloff, chairman of the Massachusetts Board of Early Education and Care, notes "The link between early childhood and STEM is indisputable. Early exposure to STEM – whether it be in school, at a museum, a library, or just engaging in the natural trial and error of play – supports children's overall academic growth, develops early critical thinking and reasoning skills, and enhances later interest in STEM study and careers."

*Pint Size Science* introduces children to STEM topics through discovery learning. Using a hands-on approach that engages and inspires young minds to explore scientific phenomena, the program works to not only build science understanding but also respond to the ever-changing interests and abilities of children.

*Pint Size Science* introduces STEM topics by using concepts that emphasize the identification and basic understanding of earth, life, physical and space sciences. The topics are introduced in these four curriculum modules:

- "Science Sprouts" serves as an introduction to the field of science
- "Gizmos & Gadgets" helps children investigate how applying technology makes work and play easier for us
- "Mini Meteorologists" focuses on the weather happening around us
- "Insect Investigators" develops skills in sorting and classifying as children observe and compare features of insects

Additionally, each *Pint Size Science* session includes a literacy component, where every class reads a book that pulls together the most important ideas of the STEM topic being discussed. Fundamental mathematical skills are also reinforced through activities, including counting, numbering, and recognizing geometrical shapes.

The professional development component of *Pint Size Science* shows educators how to use their knowledge of the children's backgrounds and interests to help them develop inquiry skills for exploring basic phenomena and materials of the world. The program helps teachers prepare a learning environment that creates experiences where children engage in explorations and investigations.

### Project Description/Objectives

- Ignite child interest in STEM by helping them discover science in the world around them through interactive, hands-on activities
- Expand the toolkit of instructional methods available to Early Childhood educators across the state
- Provide for "out-of-the-box" implementation by supplying LEAs with a complete set of curricula, activities, and program supplies.

**Grade Levels:** PreK-K (Ages 3-5)

### What is provided by the project:

- A kit for all four curriculum modules including lesson plans with opportunities for adaptations to the needs of local audiences
- All necessary supplies and materials to conduct each program module
- Professional development training on inquiry and project-based learning

### What is required by the School or Local Education Agency (LEA) in Order to Implement This Program:

LEAs participate in a day of professional development, as well as a walkthrough of each classroom curriculum module.

**Website to View Program and Standards Alignment:** <http://www.sciowa.org/learn/pint-size-science/>

**Program Video:** <http://bit.ly/pintsizevideo>